

W5YI

Nation's Oldest Ham Radio Newsletter REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

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and much, much more!

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June 1, 1993

NEW CLUB CALL SIGN ASSIGNMENT SYSTEM

The FCC Commissioners have adopted an Order to implement legislation which authorizes the Commission to use volunteer organizations to provide amateur service club and military recreation call signs. The new rules, released May 19th, provide for the establishment of Call Sign Administrators that enter into a written agreement with the Commission.

The Telecommunications Authorization Act of 1992 authorizes the FCC "...for purpose of providing club and military recreation station call signs to use the voluntary, uncompensated, and unreimbursed services of amateur radio organizations that have tax-exempt status under Section 501(c)(3) of the Internal Revenue Code of 1986."

Two other amendments to that Act also impacted the amateur service. One concerned "Signing of License Applications" which clears the way for electronic filing of amateur radio operator license applications, and the other eliminated the three year statute of limitations between violation and issuance of a forfeiture (FCC administrative fine) notice.

The American Radio Relay League (ARRL) immediately expressed an interest in being selected by the FCC as the only club and military station call sign administrators.

The ARRL application letter

On October 23, 1992, Private Radio Bureau

Chief Ralph Haller was hand-delivered a letter from the American Radio Relay League seeking to implement the new legislation. The ARRL requested that they be designated as the sole administrator of club and military recreation call signs.

"This letter, if acceptable to you, will constitute a letter of intent, to be formalized at a later date into a final agreement, thus to allow the League to commit its resources and commence necessary preparation to become the exclusive club and military recreation call sign administrator."

"The League's plan for call sign administration for club and military recreation stations, which the League suggests will minimize the work of the Commission, is as follows: Applicants (i.e. trustees duly authorized by the club to hold the license for a fixed term for the club, which is the licensee) would complete FCC Form 610-B, and mail it to the League for processing. The League would review the application to determine the eligibility of the club, determine the proper call sign on a sequential basis from a dedicated block of call signs, such as 'WC#BAA through WC#ZZZ' or similar, and prepare the Form 660 with the call sign.

"These would then be forwarded to the Commission's Gettysburg office for endorsement and mailing to the applicant. The League would also forward to the Commission a data file on each station in a Commission-specified format, with data concerning the licensee. Renewal and modification applications would be handled in the same manner as new applications if the Commission so desires, except that club and military recreation station call signs already issued would be preserved if the club wishes to retain the call sign.

"If the club wishes a new call sign from the dedicated block, it would be allowed to exchange call signs at

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the time of renewal or modification. Military recreation station call signs and applications would be handled in the same way as club station applications, and the call signs would be issued from the same block.

"The original application and relevant records would be kept by the League at its Headquarters for a reasonable time, should any question arise concerning a particular club or military recreation station; these would be available as the Commission may direct, for enforcement purposes. The League will continue the project on a regular basis, and will process applications timely, impartially and in the order that they have been received. There would be no financial obligation to any applicant whatsoever, and no monetary transactions would be involved.

"Though the League has in the past asserted, and continues to believe, that the criteria for determining eligibility for a club license should be modified, that is not an inherent element of the League's desire to provide the volunteer services set forth herein. It is the League's current plan to seek more appropriate eligibility criteria in the near future. The rule changes necessary to implement this program, however, would be non-substantive, and can be done by Order, rather than through notice-and-comment rule making. Sections 1.912 and 97.5 would have to be amended to specify the filing procedure for club and military recreation station applications on Form 610-B, and to clarify that new club and military recreation station licenses are to be issued once again.

"The League's proposal will eliminate work for the Commission's Gettysburg staff, and at the same time provide for the resumption of club and military recreation station licenses with identifiable call signs. The League is capable of providing this service in a fair, efficient and equitable manner. The task is inherently one that should be done by one entity; the League estimates that the number of new club and military recreation station applications would, during the first year of this program, number approximately 2000, and a few hundred in the years thereafter. The League's proposal is thus based on designation of the League as the exclusive club and military recreation station call sign administrator.

"As mentioned above, your signature on a copy of this letter of intent will indicate your acceptance of the plan set forth herein in principle. It is intended to give the League the necessary degree of assurance that the program will be implemented, so as to permit the necessary commitment of funds and resources to prepare for the implementation of the project. We would propose that the project be initiated on or before January 1, 1993. Upon your acceptance of the plan, we would propose to work with your staff to establish a final agreement setting forth the details of the program and the League's obligations. Signed: George S. Wilson, III (W4OYI, ARRL President.)"

The National Amateur Radio Association (NARA) also expressed an interest in being a club call sign administrator.

Call sign administrators

The rules adopted by the FCC on May 11th

make club call signs widely available, yet keep the program from becoming administratively burdensome and unwieldy for the Commission's staff. They pretty much followed the suggestion of the League, except that the FCC made provisions for multiple call sign administrators.

The Commission is requiring that any organization selected by the Commission as a club and military recreation station Call Sign Administrator have a membership, at the time it applies, that includes at least one percent of the total number of amateur operators licensed by the Commission. "With this requirement, we will assure that the organizations are sufficiently large to be capable of providing the voluntary services. Further, we may limit the total number of administrators certified at any time."

The FCC will also require that each call sign administrator enter into a written agreement with the Commission. Among other things, the administrator must agree not to charge an application fee or accept reimbursement of any kind for services rendered.

In addition, administrators must agree to accept applications for club and military recreation stations on a non-discriminatory basis. Each administrator will process applications from the trustees of club stations or custodians of military recreation stations and prepare the license document showing the call sign, ready for endorsement and mailing.

The administrator is required to forward the call sign document to the Commission's Licensing Division in Gettysburg, PA within ten days of receipt of a properly completed application from a club. Furthermore, as suggested by the ARRL, the call sign administrator must provide the FCC each month, in a format to be specified by the FCC, with a data file of license documents processed during that month.

Each administrator will be assigned initially a block of approximately 176,000 never-before issued call signs having a two-letter prefix from the NA-NZ series, a digit, and a three-letter suffix. The call sign administrator's policies and procedures for the call sign assignment system must be consistent with the International Radio Regulations.

The Commissioner's delegated authority to the Chief, Private Radio Bureau, to execute agreements with qualified organizations that desire to provide services to the FCC as a Call Sign Administrator.

The FCC will issue a Public Notice when an organization may apply to become a club and military recreation Call Sign Administrator and will later announce by Public Notice the names and addresses of organizations that have been so certified. At that time, any applications for new club or military recreation station licenses must be made on FCC Form

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610-B and submitted to a club and military recreation station call sign administrator. Applications for renewed or modified club or military recreation station licenses must also be submitted to the club and military recreation station Call Sign Administrator that initially provided the call sign.

The *Communications Act* requires the Commission to enact regulations that "...preclude the acceptance of any gift, bequest or donation that would create a conflict of interest or the appearance of a conflict of interest." The FCC does not believe that a provision for club call signs creates a conflict of interest or the appearance of a conflict of interest. The Commission intends, however, to specifically address conflict of interest regulations later.

The FCC added, "The Commission does not now issue new club call signs and has no plans to do so. The service provided by club call sign administrators, therefore, will benefit only the amateur community and will not be provided to assist the Commission in carrying out its responsibilities. We do not believe, therefore, that the provision of these services by club call sign administrators creates a conflict of interest or places the Commission in a position of appearing to have a conflict of interest..."

The Commission also agreed with the League that the rules which provide for club and military recreation stations to be issued unique station call signs by call sign administrators "...are minor and non-controversial and a subject in which the public is not likely to be interested." Therefore, the FCC said, compliance with the notice and comment procedure of the Administrative Procedure Act is unnecessary. The new Part 97 rules providing for club call sign administrators go into effect on July 19, 1993.

[Action by the Commissions by Order, May 11, 1993]

• West Virginia amateur, *Leonidas R. Moten, WD8POF*, has received a letter from the FCC stating that a local VE team did not discriminate against him. Moten, who is blind, was precluded from acting as a VE at an amateur radio operator testing session held on June 27, 1992. The VE team said Moten was not qualified because he was not able to "...observe the examinee throughout the entire examination" as required by Section §97.509(a).

The discrimination complaint started at the state level when Moten filed a protest with the West Virginia Human Rights Commission. It eventually became a federal complaint.

Section 504 of the *Rehabilitation Act of 1973* specifies that "No otherwise qualified individual with handicaps ...shall solely by reason of her or his handicap be excluded from the participation in ...any

program or activity... conducted by any Executive agency..."

PRB Chief Ralph Haller also refused to grant Moten a waiver of the Part 97.509(a) requirement since it "...would defeat the purpose of the Commission's rule to insure that at least three examiners are present to observe examinees and thus preserve the integrity of the examination process."

AMATEUR RADIO CALL SIGNS

...issued as of the first of May 1993:

<u>Radio District</u>	<u>Gp. "A"</u>	<u>Gp. "B"</u>	<u>Gp. "C"</u>	<u>Gp. "D"</u>
	<u>Extra</u>	<u>Advan.</u>	<u>Tech/Gen</u>	<u>Novice</u>
0 (*)	AAØMR	KGØFH	NØWMS	KBØLFG
1 (*)	AA1GE	KD1ON	N1OZA	KB1AVV
2 (*)	AA2NM	KF2OJ	N2UQC	KB2QDW
3 (*)	AA3EI	KE3HV	N3OXE	KB3ASK
4 (*)	AD4DH	KQ4TB	(***)	KE4AQU
5 (*)	AB5MO	KJ5KY	(***)	KC5ACP
6 (*)	AB6SY	KN6KS	(***)	KD6UII
7 (*)	AA7VR	KI7MP	(***)	KB7UEE
8 (*)	AA8KV	KG8AR	N8YGD	KB8OXC
9 (*)	AA9GY	KF9PA	N9TGL	KB9IOG
N.Mariana Is.	AHØQ	AHØAM	KHØBG	WHØAAV
Guam	NH2P	AH2CS	KH2GR	WH2ANF
Johnston Is.	AH3D	AH3AD	KH3AG	WH3AAG
Midway Is.		AH4AA	KH4AG	WH4AAH
Hawaii	(**)	AH6MO	WH6MC	WH6CQJ
Kure Is.			KH7AA	
Amer. Samoa	AH8G	AH8AF	KH8AK	WH8ABB
Wake W.Peale	AH9C	AH9AD	KH9AE	WH9AAI
Alaska	(**)	AL7OV	WL7KE	WL7CGY
Virgin Is.	NP2X	KP2CC	NP2GM	WP2AHU
Puerto Rico	(**)	KP4VG	(***)	WP4LYI

CALL SIGN WATCH: * =All 2-by-1 "W" prefixed call signs have been assigned in all radio districts. Group "A" 2-by-2 format call signs from the AA-AK block are next assigned to Extra Class amateurs when 2-by 1's are all allocated.

** =All Group A (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class when Group "A" are depleted.

*** =Group "C" (1-by-3) call signs have now run out in the 4th, 5th, 6th, 7th and Puerto Rico call districts. According to the rules (adopted by the Commission Feb. 8, 1978, Docket No. 21135), Technician/General class amateurs are next assigned Group "D" (2-by-3 format) call signs when all Group "C" have been allocated.

Upgrading Novices holding a 2-by-3 format call sign in the 4th, 5th, 6th, 7th and Puerto Rico call areas will no longer be able to request a Group "C" call and will be automatically assigned another more recent 2-by-3 format call sign if they do! The FCC will not be going back and reassigning unused "K" and "W" 1-by-3 format call signs.

[Source: FCC, Gettysburg, Pennsylvania]

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- A new satellite has joined a proud family of satellites serving the amateur radio community. Sponsored by the French RadioAmateur Club de l'Espace (RACE), the ARSENE (UO-22) satellite was orbited aboard an Ariane-4 rocket right on schedule on May 12 at 00:56 UTC. It was launched from the European Space Agency's spaceport in Kourou, French Guiana located on the northern coast of South America.

The ARSENE French Amateur Radio club satellite was one of two deployed. The other bird is the commercial ASTRA-1C satellite of the Luxembourg-based Societe Europeene des Satellites. The Goddard Space Center's WA3NAN in Greenbelt, MD retransmitted the ARSENE launch commentary but was not able to begin until the launch was already in progress. John Bosak, K3IBN, arranged the audio feed from WITF-TV in Harrisburg, PA.

After some initial difficulties in establishing command of ARSENE after launch, a Paris ground command station (FF1STA) was eventually able to successfully command the Mode-S transmitter, and start the flow of space-craft telemetry from ARSENE. According to the telemetry sent by ARSENE the satellite is working perfectly. The problem was that nobody has heard anything on VHF downlink frequency of 145.975 MHz.

Even the downlink 2446.47 MHz signals were very weak and it was first thought that the satellite entered orbit at an incorrect angle or that the on board equipment was malfunctioning. The capture of the telemetry is a very important step to ensure that all of ARSENE's subsystems are performing properly in preparation for the firing of the ARSENE rocket motor.

After analyzing the telemetry, ground controllers issued the command for ARSENE to ignite the MARS (Moteur ARSene) "apogee-kick-motor" to raise its dangerously low perigee to a considerably higher and safer altitude. The initial "geostationary transfer orbit" was about 125 miles by 22,000 miles in altitude.

The ground controllers are still studying ARSENE's telemetry and will fire the motor for a second time to achieve an orbit of 12,500 miles by 22,500 miles. And the search is still on

to locate a small VHF signal coming from ARSENE. After more motor burns, ARSENE's final elliptical orbit will be above the equator with a 17 hour, 30 minute period.

ARSENE will then be open to packet traffic from all radio amateurs worldwide as an orbiting digipeater with an uplink is 435.100; downlinked to 2446.500 MHz. (Also 145.975 downlink, with uplinks at 435.050 and 435.150 MHz if RACE can get Mode B working.)

- Interesting tidbit! CNN (Cable News Network) weekend anchorman, David French, N4KET of McLean, Virginia, has accepted a position as press secretary at the CIA.

- The United States Senate will begin taking testimony this month on the *activity and abuses of Home Owners Associations*. Senator John Glenn (Ohio) and his *Governmental Affairs Committee* is interested in learning how they infringe on individual rights.

- At a meeting of the Board of Directors of the Mid-America Coordination Council (MACC), held in Dayton, Ohio, the board elected the state of Oregon to MACC. The council now coordinates amateur radio frequencies in nineteen states: Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Upper Peninsula Michigan, Minnesota, Missouri, Montana, North Dakota, Nebraska, Ohio, Oregon, Oklahoma, South Dakota, Western Washington, Wisconsin and Wyoming.

- A Rose Bowl security guard who is not a licensed amateur is out \$40. It seems he bought an Alinco dual-band handheld ham radio at a "floating" flea market in Los Angeles. Peter Fogg, KA6RJF, of Pasadena, CA works as a communications specialist for the Rose Bowl committee. He noticed the call sign KD6OEM engraved on the radio. Detective Rada of the Los Angeles Police Department was called in to investigate and the radio was eventually returned to Alan Mark, its rightful owner. No charges were pressed against the surprised security guard. The lesson to be learned: Mark your radio!

- The first 100 kilohertz of the ten

meter ham band continues to be a haven for unlicensed Spanish speaking "CB type" single-sideband communications. The Region II IARU Monitoring System continually reports on this type of interference. The problem is what to do about it?

- Do you remember the write-up we did in our April 1st issue about a Swiss-based outfit called "High Adventure" that would be selling advertising space on a 10-million cubic foot balloon to be used by a sky diver next year to break the free fall record?

Dawson Hargrove, W4OQP, of Orlando advises the current high altitude parachute jump record was established in August 1960 at Holloman AFB in New Mexico. Joe Kittinger (Col. USAF) N4HDP bailed out of an open gondola at 102,800 feet and his free fall was four and one half minutes.

"Joe is also the only person to fly across the Atlantic solo in a balloon. In Sept. 1984 he flew from Caribou, Maine to northern Italy. Ham radio was one of the major means of communication." Hargrove, who is a consultant to wild adventurers, was Flight Director and Operations Chief of that mission.

- All that baloney you read on the Prodigy Information Service's "Ham Radio" bulletin board about the ARRL Insurance Program being broke is just that. Not a word of truth in it. A female with an false Extra Class call sign has been publicly posting a series of slanderous announcements saying the ARRL Insurance Policy was revoked on April 21st for non-payment of premiums. The League, according to the bogus posting, has "...no plans to replace the defunct policy. Policyholders may request a refund through the ARRL in Newington. Funds approximating fifty cents on the dollar are available if requests are received no later than April 30, 1993." The whole thing is a hoax, but did extract a big on-line response from the amateur community. One fellow even went as far as to agree with the posting and said he "...received a refund on my premium last Wednesday."

- According to a recent JARL News bulletin, there are now 7.7 million

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radio stations in Japan - an increase of 1.1 million since last year. 1.2 million are amateur radio stations. The JARL also said they had 180 thousand members, with 50% being between the ages of 35 and 55 years old.

- *May amateurs legally assist the police with routine emergency and "distress" communications?* In a word, the answer is "No." The FCC, in a letter to the Municipal Justice Center in Aurora, Colorado, said that the ham bands may be used by an amateur or its operator for emergency communications "...when such communications are essential in connection with the immediate safety of life and the immediate protection of property and normal communications are not available." Routine traffic matters are the business of the police department. "...the Commission's Rules, §97.113(a), prohibits any communications which is intended to facilitate the business or commercial affairs of any party."

- The FCC has refused to review a decision that would have withdrawn all documents from the record of Richard A. White, Jr., KA3T. He was one of the amateur's who received a letter from the FCC's Norfolk, Virginia field office in January 1991 stating that he may have operated his station in violation of the §97.113(a) which prohibits business communications on the ham bands. White, who did not originate the message, felt the correspondence slandered his amateur operating record.

What he did do, however, was to inadvertently and automatically retransmit a packet radio message "...that appeared to facilitate the business activity of an organization known as The Coalition to Stop U.S. Intervention in the Middle East." This was the infamous "900" packet message that skipped through several digipeaters before being killed. It urged amateurs to vote against the war by calling a 900 telephone number.

Several letters were exchanged between the FCC in Norfolk, VA and White's attorney, John J. McVeigh who is also KD4VS. On June 18, 1991, the FCC advised McVeigh that "...no further action would be taken in the matter because it appeared that steps had been

taken to assure that no packet message addressed to all amateur stations emanates from White's station without prior screening for compliance with the rules."

McVeigh wanted all letters concerning the incident purged from his client's record. The FCC refused saying "...nothing in the record would be prejudicial to [White] in any future regulatory proceeding." McVeigh then filed a *Petition for Reconsideration* which was denied and dismissed. An *Application for Review* appeal of that dismissal has now been denied. The Commission believes that the request to withdraw all related correspondence from the record is unwarranted. "We do not consider a licensee's file contaminated merely by the presence therein of an exchange of correspondence between the Commission and the licensee."

- Bridge crane operators of the Robinson Engineering Company had been given a waiver allowing them to use 72 and 75 MHz frequencies allocated to Part 95 radio controlled surface and aircraft models. The FCC has now issued a Public Notice to remind those users that the waiver ends on June 30, 1993.

• Community Video Associates, Inc. a non-profit charitable tax-exempt foundation, has announced that it has taken over production of satellite radio's "This Week in Amateur Radio." This bulletin/broadcast service, part of the "Let's Talk Radio Network", airs each Saturday afternoon at 5:00 p.m. (ET) via the Spacenet 3 communications satellite, transponder 21, 5.8 MHz wideband audio. The program currently offers Newsline, the RAIN Report and various other information features to amateur radio repeater stations and networks, radio hobbyists and satellite TV enthusiasts throughout North America. Further information is available from producer-host Stephan Anderman, WA3RKB: telephone 518/439-4519 after 8:30 p.m. ET.

- The American Radio Relay League has a new weekend video course leading toward the entry-level Technician Class Amateur Radio license. "The new 5-hour video course gives you everything you need to know

to get your first Amateur license," says Steve Mansfield, ARRL Public Information Manager. The ARRL course includes five hours of video tape, a review book and an optional practice exam computer diskette that administers and score sample tests using the exact questions that are in the new FCC question pool. The course is produced by King Schools of San Diego, which has used the same instructional techniques to help hundreds of thousands of private pilots pass their aviation exams. Cost: \$99 (\$119 with the computerized review.) ARRL, 225 Main St., Newington, CT 06111.

The W5YI Group, Inc. also has a video course that covers all nine sub-elements in the new No-Code Technician question pool - complete with a 240 page study textbook, Part 97 Rule Book, and documentation. Cost: \$39.95. Computer course (IBM compatible) with explanations and sample tests also included for only \$10 additional: \$49.95 total. Available from: P.O. Box 565101, Dallas, TX 75356 or (VISA-MasterCard) telephone toll free: 1-800-669-W5YI. W5YI translates to 9594.

- John WA5OHG and Ann KA5TZD Fleet of Dallas are sponsoring Svetlana Strezeva to live with them and attend school in the United States. John is a founder of the Dallas Ham-Com Convention, the nation's second largest hamfest.

Svetla's father is Peter UA3AOC; one of the amateurs who at great personal risk, provided Boris Yeltsin with communications from inside the Russian White House during the attempted coup in Russia when all communications were cut off.

Peter has also been a member of two different Trans-Polar Ski Trips where the USSR and Canada fielded a joint team to trek to the North Pole. Peter provided the communications on these trips.

By the way, the Dallas Ham-Com Convention takes place at the Arlington, Texas, Convention Center on June 5 and 6. See you there!

- The FCC has upheld fines totaling \$6,000 against three FM broadcast stations for airing indecent material in a 1988 Howard Stern program.

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- WordPerfect 6.0 for DOS will begin shipping later on this month. It is the first major upgrade since 1990 of the world's best selling word processing program. There will be many new features - including the ability to open as many as nine different documents at once! And with many graphic and character interfaces, you will be able to see exactly what the printed page will look like as you type. Current users of the \$495 program will be able to upgrade for \$129.

- The Microsoft and Intel have formed an alliance to develop addressable interactive cable converters. The objective is to let viewers send information back through their television sets.

- Not much is happened at the FCC even though President Clinton has been in office 100 days. A permanent FCC Chairman has yet to be named, but Toni Cook (as we have reported previously) is still the front runner. And the administration still wants to auction off radio spectrum to raise \$4 billion. We hear that the White House is putting together a "high-level interagency" task force to develop a regulatory policy aimed at speeding the upgrade of public telecommunications.

- The Clinton administration is in favor of the 1992 Cable Act which has been taking most of the Commission's time (and resources.) Congress failed to include a supplemental appropriation of a requested \$12 million so the FCC to administer the Act which would save consumers \$1.5 billion.

Cable operators, who will have been ordered by a 586-page FCC Order to roll back rates, will be looking to the courts for relief. Most cable companies don't understand the formulas and benchmarks for calculating their new rates. Even the FCC may not understand them. They held a workshop in the commission meeting room last week, but wouldn't take any questions. All inquiries had to be sent in ahead of time in writing.

- It won't be long before cable has competition from new DBS (direct broadcast satellite) broadcasters, DirecTV and USSB. Both have already

signed distribution deals with most of the nation's top programmers. DirecTV (a Hughes Electronics subsidiary) plans to offer 150 channels to an 18-inch satellite receiving system. USSB is Hubbard Broadcasting's United States Satellite Broadcasting network. They begin service next year. Rural America will be a big beneficiary.

- New Pentium killers to debut within six months! Look for Apple Computer to begin abandoning its proprietary Macintosh technology. They will shortly be replacing their Motorola 68000 microprocessor with a new chip called the PowerPC. Now in development by Motorola and IBM, PowerPC runs much faster than Intel 486's... as well as their new 64-bit Pentium CPU. The big deal, however, is that new microprocessor will not only run existing Macintosh programs but offers a bridge to Microsoft Windows as well. Apple will release its new technology into the public domain and hopes that it will emerge as the new PC standard.

- The Global Maritime Distress and Safety System (GMDSS) is an international automated maritime distress alerting program that uses satellite and advanced ground-based communications. GMDSS, which is being phased in between 1992 and 1999, makes manual telegraphy obsolete as an emergency communications means for ships at sea.

Last week, the FCC amended their rules to prohibit the operation of Part 15 low-power non-licensed devices on the bands authorized for GMDSS and reduced the width of the existing restricted frequency band at 490-510 kHz to 495-505 kHz. Although 500 kHz is an international distress frequency, it no longer will be monitored by the U.S. Coast Guard.

The FCC also released a Notice of Proposed Rule Making on May 12th which seeks to relax the requirement that all passenger ships and large oceangoing cargo vessels carry a radiotelegraph (manual Morse code) station.

If adopted, ship owners operating on certain voyages will no longer have to apply for an exemption of the radiotelegraph station rules when the

vessels remain within the effective communications coverage of U.S. Coast Guard or public coast stations.

- Consumers next year will be able to browse through classified ads by interactive TV. The service is expected to be available next year on the Interactive Channel. The classified ads will offer both graphics and sound. A real-estate ad could offer a room-by-room tour; an employment ad could include a picture of the work environment. Classified advertising, a \$10.8 billion business, is only one of a host of new programs, that will be offered as 500 channel cable becomes a reality!

- You would think that a video rental company such as Blockbuster Entertainment would be a casualty when pay-per-view movies become available around-the-clock on dozens of cable channels. But they are not standing still! Blockbuster recently announced a deal where they will be drawing on a massive database library of digitally recorded music to manufacture audio cassettes and CDs in music stores on demand. IBM will make the "Soundsational" hardware. Many members of the recording industry are not happy! Blockbuster's "New Leaf Entertainment" plans to specialize in out-of-stock and hard-to-find titles.

- Three new Russian countries have joined the International Telecommunication Union as members so far this year. They are Georgia, Slovakia and Kazakhstan. The ITU now has 176 member nations.

- Bill McArthur is the newest NASA astronaut to become a radio amateur. Bill, now KC5ACR, is a member of the STS-58 shuttle crew. Janice Voss, a member of the STS-57 team, is in the process of taking her ham test. Both missions are scheduled for later on this summer.

- The FCC has abdicated to the Federal Trade Commission on new 900 number rules. The FTC regulations are more extensive than those of the FCC and include a longer preamble and a so-called "kill message" where callers can hang up to avoid being charged.

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NOVICE TESTING UNDER VEC SYSTEM

In our last issue we mentioned that the FCC Commissioners had agreed to place Novice amateur operator testing under the VEC System. At that time we only had a copy of the FCC press release. We have now received the actual text of the *Report & Order* (R&O) which was released on May 14th and can now report on the matter in a more accurate and thorough manner. Here is a complete run down on the FCC's decision to fold Novice testing into the VEC System as extracted from the R&O.

Background

On July 13, 1992, the FCC adopted a *Notice of Proposed Rule Making* which anticipated placing the responsibility for the preparation and administration of entry-level Novice Class operator license examinations under the volunteer-examiner coordinator (VEC) system. On May 3rd, the FCC adopted their proposal essentially as proposed.

Currently, each examination for an amateur operator license except the Novice license is administered at a session coordinated by one of the eighteen VECs. Under this program, the examination is administered by three volunteer examiners (VEs) accredited by the VEC. An examination for the Novice license is administered at an informal session by two licensees selected by the examinee.

There are actually six amateur operator license classes: Amateur Extra, Advanced, General, Technician, Technician plus Code and Novice. The Amateur Extra Class operator license is the highest class license and conveys the most operating privileges while the Novice Class operator license is the lowest class and carries the least benefits.

In the interest of integrity, simplification and efficiency, the FCC proposed to place the responsibility for the preparation and administration of Novice license examinations in the VEC system.

Comments from the public

The two most active VECs, the ARRL-VEC and W5YI-VEC supported the FCC proposal in their comments. Both were convinced that the use of accredited VEs in the VEC System would improve the integrity of the Novice examination program and minimize irregularities.

The American Radio Relay League believed that the application error rate would decrease and that more efficiency would result because the Commission would have to interact administratively with only a few VECs rather than deal with thousands of examiners who are not accredited or coordinated by a VEC.

The FCC also addressed two secondary matters in the Order. The first had to do with VECs and VEs accepting reimbursement for their out-of-pocket expenses incurred while administering Novice license examinations. And second, some commenters felt that the VEC System could pose an examination hardship in sparsely-populated areas and that General Class licensees should be allowed to administer the Technician as well as the Novice license examinations.

The FCC said their proposal to allow volunteer examiners and VECs to recover out-of-pocket costs incurred in preparing, processing, administering or co-ordinating Novice examinations drew mixed responses. Some commenters believe a reimbursement fee is appropriate; while others opposed any cost associated with the Novice license examination. A few felt that the test fee might be waived - especially in the case of youngsters.

The American Radio Relay League took no position on the Novice test fee matter, but did ask for a clarification on whether a VEC could waive reimbursement from an entire class of examinees for a year, provided it does so for all examinees for a particular class of license in all areas where it administers examinations.

Several parties filing formal comments with the FCC favored allowing General Class licensees to administer examinations for Technician licenses as well as examinations for Novice licenses. The W5YI-VEC pointed out that allowing General Class licensees to administer Technician license examinations is in accordance with the statutory authority concerning the duties of VEs.

Several commenters were concerned that the addition of another VE would cause a hardship to examinees in remote areas. One amateur even suggested that perhaps only one VE should be required for Novice examinations administered in Alaska because of the absence of highways, the rugged terrain and the fact that air travel must be relied on. The ARRL agreed that "...no matter how many examination opportunities are available, there will always be some type of hardship for those in a rural environment."

Novice exams in the VEC System

The FCC acknowledged that there was convincing support for placing the Novice Class Operator license examination in the volunteer-examiner coordinator system. It noted:

- (a.) the Novice exams are already being administered in the VEC System since they are a prerequisite for all other operator licenses as well and;
- (b.) a marked decline in Novice license interest due to the advent of the codeless Technician Class.

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Folding the Novice examination into the VEC System would also help standardize and simplify the license qualification process, the FCC application Form 610 and avoid the confusion that now exists because of two different entry level examination programs.

"The VEC System, furthermore, is much more efficient than the Novice system. The oversight provided by the VECs results in far fewer administration discrepancies and application errors than the Novice system." The FCC said that application Form 610 errors in the VEC System were less than 1%, but soared to nearly 10% in the informal Novice testing program. The FCC added that the data kept by VECs "...provide a timely overview of the examination process and a means to gauge the effectiveness of the examination system."

Expense reimbursement

The Commission believes there is no valid reason to require VEs and VECs who donate their time to absorb the additional cost of providing Novice examinations. In addition, every examiner and VEC must certify that all costs for which reimbursement was obtained was necessary and prudent.

The FCC pointed out that the small fee (a current maximum of \$5.60) "...has not hampered the growth of the other license classes, for which reimbursement is permitted."

Responding to the ARRL's question regarding a waiver of the test fee, the FCC said "The examination-by-examination [computation] method allows the VEs and VECs the option of not recovering out-of-pocket costs from any particular examinee. The annual method [which all VECs use] does not allow such an option."

The "annual method" involves totalling up all expenses for the prior year and dividing by the number of examinees. Where this individual test fee amount exceeds the maximum allowable reimbursement, then this amount (currently \$5.60) is the most that may be charged at exam sessions during the following year. The maximum allowable amount is adjusted annually.

Examinations in remote areas

"Sparsely-populated areas by their nature, often involve some higher degree of inconvenience in matters requiring human assistance than do other locales," the FCC stated in their Order. "The presence of three administering VEs at each examination session, however, is the cornerstone of the VEC System." Three VEs provide cross-checking of answers, assure proper completion of the application form and for minimize the likelihood of fraud and abuse.

The FCC said that "Rather than reducing the

number of administering VEs to two, we believe a better approach would be to authorize General Class licensees to also administer the Technician examination... This will provide a pool of almost 300,000 possible VEs to administer examinations for the two [entry level] classes..." This nearly doubles the potential number of examiners for the Novice and Technician Class. Right now there are approximately 170,000 Advanced and Amateur Extra Class licensees who qualify as examiners for the Technician Class.

Conclusion

The Commission feels "The number of examination opportunities will grow as a result of the our decision allowing General Class operators to administer both Technician and Novice operator license examinations and permitting VECs and VEs to be reimbursed for their out-of-pocket expenses when coordinating and administering Novice examinations. We believe that amateur operator license examinees will continue to be well served by the VECs and their accredited VEs."

Accordingly, the FCC has decided effective July 1, 1993, to change the amateur service rules to place the responsibility for the preparation and administration of Novice Class operator license examinations under the VEC System and to allow recovery of out-of-pocket costs for coordinating and administering such examinations.

Accrediting General Class VEs

There are eighteen different VEC organizations. The two largest, the ARRL-VEC and W5YI-VEC groups, account for 85% of all amateur license testing. You can obtain an ARRL-VE application by writing: ARRL-VEC, 225 Main Street, Newington, CT 06111, Tel. 203/666-1541. The W5YI-VEC also has them available from: P.O. Box 565101, Dallas, TX 75356. Tel. 817/860-3800 during regular business hours.

If you want to speed things up, you can simply write out the following short statement, add your signature and send (or FAX) to the W5YI-VEC along with a copy of your operator license. We will forward your accreditation by return mail. There is no cost unless you want a colorful wall certificate (\$1.00). Here's the statement to send:

"I am a currently licensed General (or Advanced or Amateur Extra) Class amateur radio operator and wish to be a volunteer examiner. I have never had my station or operator license revoked or suspended. I do not own a significant interest in nor am an employee of any company or entity engaged in the amateur radio equipment or license preparation business. My age is at least 18 years old."

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Send that statement to: W5YI-VEC, P.O. Box 565101, Dallas, Texas 75356 and you will be sent your VE credentials by return mail. You may also FAX this information to: 817/548-9594. Again there is no cost.

Each VEC has slightly different examination procedures so you will need to contact your coordinator. The W5YI-VEC, however, has easy-to-use examination software that generates properly constructed written tests using IBM-compatible PCs. The examinations can even be administered at the computer which ejects a scored answer sheet immediately after the test.

Simply ask for the examination disk if you wish to provide an examination service for a beginner wishing to become a Novice or Technician. There is no cost for this computer program. Every examination generated will be different. Be sure to state whether you need 3½" or 5¼" size disks.

Remember, however, the rules require that you make a public announcement prior to conducting the test session and three W5YI-VEC accredited examiners must be present to administer the examination and certify the Form 610.

Most VEC organizations charge a test fee of \$5.60 to applicants being administered amateur radio operator examinations. This amount is collected from the examinee. The ARRL-VEC and W5YI-VEC share expense reimbursement with its volunteer examiners since they too have costs that must be paid.

• **David & Sherri Brower (WA4NST & N4XLF) of Vero Beach, Florida,** advise that on appeal, a local court has found that local city ordinances which limit tower heights to 70 feet are pre-empted by PRB-1 and Sec. 125.0185 of the Florida statute that incorporates PRB-1 into state law.

Quoting the opinion written by Judge J. Kenney, "We conclude that the ordinances in question are nothing more than flat and arbitrary prohibitions enacted without any attempt to consider, much less balance, legitimate community concerns, with similarly legitimate, and legally recognized rights, of amateur radio licensees."

The appeal of the civil trial that found the radio transmissions to be a "...noxious and offensive activity and the appearance of the tower and antenna an annoyance and nuisance to the neighborhood" is still pending. The issue in this case is the broad interpretation of deed restrictions to prohibit amateur radio.

The Browers told us that their tower and antennas are still standing "...but we are still enjoined from further radio transmissions from our home. We will not give up our fight to protect the future of our great hobby."

HAM OPERATOR MUST PAY \$50,000 FOR ORIGINATING FAKE DISTRESS CALLS

A Fairfax (Virginia) ham radio operator whose phoney Maydays created a wild-goose chase in the West Indies last summer has agreed to reimburse the U.S. Coast Guard \$50,000. Jorge Mestre, NS3K, age 50, also was sentenced on May 12th to 60 days home confinement with work release privileges and one-year probation. In addition, he was ordered to perform 200 hours of community service, pay a fifty dollar special assessment and to permanently surrender his Amateur Extra Class ham ticket. He could have received up to six years imprisonment and a fine of \$250,000.

Actually the problem of phoney distress calls involving this individual first came to the attention of the FCC in 1991. At that time the FCC circulated a press release saying they were investigating false distress signals which caused the Coast Guard to deploy a helicopter to the Duck Island, North Carolina area.

On November 10th, 1991, at approximately 10:00 p.m. a ham operator heard a distress call from a station with a Spanish accent identifying itself as KD4NTT. The station stated that he had run aground and was taking on water on a reef 20 miles east of Duck Island.

Two or three months later, a similar incident happened supposedly off the coast of Cuba. In both cases, the FCC quickly DF'ed the signals once they were alerted by the amateurs. And both times the position readings pointed to Northern Virginia. Unfortunately, however, the FCC didn't have time to get a mobile van out to do close in "fine tuned" DF'ing. They could only identify a transmission area of about 20 miles.

On August 7th, 1992, false distress communications consisting of both single sideband (SSB) voice and Morse Code transmissions were heard on the infamous 20 meter frequency of 14.313 MHz. They falsely reported a sinking vessel off the Turks and Caicos Islands in the British West Indies. It was also incorrectly reported that six persons aboard the ship were in the water and needed to be rescued. For a period of about two hours during that evening, the concocted distress communications continued intermittently and included the internationally recognized Morse Code distress signal, "SOS."

The distress signals were monitored by other amateur radio operators who notified the Coast Guard and the FCC. Almost immediately, the Commission's long range direction finding network swung into action and began monitoring the signals. Again, the signals were traced to Northern Virginia. The Coast Guard, however, was unwilling to risk ignoring what might

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have been a real sinking and continued the its search in the West Indies. U.S. Coast Guard rescue policy requires that it commit the assets necessary for locating a vessel in distress and for assuring the safety of individuals aboard such a vessel.

Upon receiving notification of the distress signal, the Coast Guard immediately began a major search and rescue operation. Coast Guard medium endurance cutters, fixed wing aircraft and two helicopters were deployed to the area claimed to be the sinking ship's location. Additionally, the Government of the Turks and Caicos Islands launched their patrol craft, and merchant marine ships in the area were advised of a vessel in distress.

The West Indies search ultimately cost the Coast Guard more than \$100,000. But it really was not an isolated incident. In the first half of 1992 alone more than 180 fake distress calls were received by the 5th Coast Guard District which is based in Portsmouth, Virginia, and covers waters from South Carolina to New Jersey.

Responding to such hoax distress calls diverts crucial Coast Guard equipment and personnel that may be needed to respond to real emergencies to conduct legitimate search and rescue operations, poses unnecessary threats to the safety of Coast Guard personnel, and is extremely costly to the government.

The FCC recorded the phony transmissions. Using the direction finding data, subsequent detailed technical analysis of tape recordings of the hoax transmissions, and information provided by other ham radio operators, the FCC was able to later identify Mestre's amateur radio station as the source of the deceptive distress messages.

Later on that night about 11:15 p.m., another ham operator in the Fairfax, Virginia, area called the FCC and suggested that the distress calls might be a hoax. He said the transmissions were originating so close to him that they were overloading his equipment. He also believed the Spanish-accented voice sounded like a neighbor who had been known to use false DX call signs on the amateur air waves in the past.

Transmitter ID "signatures"...

Actually the FCC used basically the same method of analyzing radio signals that they developed in the famous "Captain Midnight" and "Playboy" satellite jamming cases. In both of these instances, the FCC was able to identify uplink transmitters that overtook satellite TV programming. In both instances, different satellite uplink operators jammed HBO and "Playboy" with video messages because they opposed scrambling and X-rated movies. How the technology works is

interesting.

There are certain parameters of a signal that are peculiar to a specific radio transmitter. One of these features is the "turn on" time until a rig gets to full power on a specific frequency. Mestre was using CW during the August 7th incident which essentially is the same as turning the transmitter off and on. The FCC simply measured and carefully analyzed the signal rise time with an oscilloscope.

By examining the radio signal "signature," the FCC was able to identify two radio transmitter "turn on" characteristics that when matched with those qualities contained on another recording from that same transmitter clearly identified Mestre's transmitter as being responsible for sending the false Morse Code distress messages.

The two transmitter characteristics were transmitter instantaneous frequency and transmitter power. In theory, a radio transmitter should turn on instantly with full power on the frequency it is set to. In the real world, however, radio transmitters do not ...and can not do that, just as automobiles cannot accelerate instantly to highway speed. The actual variations from an ideal hypothetical transmitter "turn on" are both a function of the transmitter equipment design and the precise value of the particular electronic components in the transmitter which are seldom their exact nominal or ideal value.

Two different transmitters adjusted to the same level in frequency will differ in their measured "turn on" characteristics. A study of their instantaneous frequency and magnitude of output power during the first one hundred milliseconds or less after a radio transmitter is turned on conclusively reveals different and distinctive characteristics ...even between different transmitters of the same manufacturer and model.

The subsequent testing of Mestre's radio equipment, which was seized under a federal search warrant, confirmed that his station was indeed responsible for the hoax transmissions. He is also suspected of having been involved in at least three additional false distress cases within the last several years.

Jorge Mestre, who had a relatively high level government job with the Nuclear Regulatory Agency, later came forward with his attorney and offered to plea bargain. This was just as the U.S. Attorney was getting ready to go to the Grand Jury to obtain a felony indictment. Mestre pleaded guilty on Friday, February 12 in Federal District Court in Alexandria, Virginia. Besides the \$50,000 single lump sum repayment, Mestre agreed to surrender his amateur radio license and dispose of his ham equipment within 60 days. He must also participate in an alcoholic counselling and rehabilitation program.